WHAT IS CLAIMED IS:

1. A process for producing a magnetic anastomotic component suitable for implantation in a patient's body, the process comprising steps of:

forming an anastomotic component having a desired configuration from a material capable of producing a magnetic field, the anastomotic component having an exterior surface;

processing the anastomotic component to make the exterior surface suitable for receiving a layer of biocompatible material; and

providing the exterior surface of the anastomotic component with a layer of biocompatible material.

2. The process of claim 1 wherein the processing step is performed to make the exterior surface of the component substantially smooth.

3. The process of claim 2 wherein the processing step comprises removing unwanted material from the exterior surface of the component by abrasive microblasting.

4. The process of claim 3 wherein the processing step comprises placing the component in a mechanically abrasive environment.

5. The process of claim 2 wherein the processing step comprises grinding the exterior surface of the component.

6. The process of claim 2 wherein the processing step comprises acid etching the exterior surface of the component.

7. The process of claim 1 wherein the providing step comprises disposing a layer of biocompatible material over another layer of material that covers the exterior surface of the anastomotic component.

8. The process of claim 7 wherein the layer of biocompatible material is Gold and the other layer of material is Gold or Nickel.

9. The process of claim 1, further comprising electropolishing the component after placing a final layer of material thereon.

10. The process of claim 1 wherein the component has an overall thickness within the range of from about 0.010 to about 0.030 inch, and the biocompatible layer has a thickness within the range of from about 0.0002 to about 0.0020 inch.

11. The process of claim 1 wherein the component is formed from NeoFeB and a layer of biocompatible material is placed over the NeoFeB.

12. The process of claim 1 wherein a portion of the exterior surface is formed with means for enhancing engagement between the component and the tissue of a vessel.

13. The process of claim 1 wherein the forming step forms a component comprised entirely of a material capable of producing a magnetic field.

14. The process of claim 1 wherein the forming step forms a component having a first configuration and the processing step changes the component to a second configuration having structural differences from the first configuration.

15. The process of claim 1 wherein the providing step comprises plating the exterior surface of the component.

16. The process of claim 15 wherein the exterior surface of the component is plated more than once.

17. The process of claim 1 wherein further comprising assembling the anastomotic component is assembled with a delivery device for packaging and sterilization.

18. The process of claim 1 wherein the anastomotic component is packaged and sterilized after the providing step.

19. The process of claim 18 wherein the component is magnetized either before or after being packaged and sterilized.

20. A process for producing a magnetic anastomotic component suitable for implantation in a patient's body, the process comprising steps of:

forming an anastomotic component having a desired configuration from a

material capable of producing a magnetic field;

packaging the component;

sterilizing the component; and

magnetizing the component in the package.

21. The process of claim 20 wherein the anastomotic component is packaged, magnetized and then sterilized.

22. The process of claim 21 wherein the component is packaged, sterilized and then magnetized.

23. The process of claim 22 wherein the component is sterilized by gas.

24. The process of claim 21 wherein the packaging step comprises including a plurality of magnetic anastomotic components as part of a kit.

25. The process of claim 24 wherein the packaging step further comprises including at least one delivery device in the kit.

26. The process of claim 20 further comprising microblasting or acid-etching an exterior surface of the component to remove unwanted material, and then coating the compatible with a layer of biocompatible material prior to the packaging step.

27. A process for producing a magnetic anastomotic component suitable for implantation in a patient's body, the process comprising steps of:

providing an anastomotic component having an ability to produce a magnetic field, the component having an exterior surface;

placing a layer of material on a first portion of the exterior surface of the component so as to leave a second portion of the exterior surface of the component uncovered by the material; and

magnetizing the component.

28. The process of claim 27 wherein the material placed on the first portion of the exterior is paramagnetic.

29. The process of claim 28 wherein the second portion of the exterior surface of the component defines an area of concentrated magnetic flux.

30. The process of claim 29 further comprising placing a layer of different material over the exterior surface of the component.

31. The process of claim 30 wherein the different material has diamagnetic properties.

32. The process of claim 29 wherein the second portion of the component defines a continuous area of concentrated flux.

33. A process for producing a magnetic anastomotic component suitable for implantation in a patient's body, the process comprising steps of:

forming an anastomotic component having a desired configuration from a material capable of producing a magnetic field, the component having an exterior surface;

subjecting the component to an acid etching process to remove surface irregularities; and

providing the exterior surface of the component with a layer of biocompatible material.

34. The process of claim 33 wherein the subjecting step is performed by placing the component in a solution containing phosphoric acid.

35. The process of claim 34 wherein the component is placed in the phosphoric acid solution for an amount of time within the range of from about 5 minutes to about 15 minutes.

36. The process of claim 34 further comprising subjecting the solution to electric potential after the acid etching step

37. The process of claim 33 further comprising providing at least a portion of the exterior surface of the component with traction structure for enhancing engagement between the component and the tissue of a vessel.

38. The process of claim 37 wherein the traction structure comprises a surface of the component provided with adhesive.

39. The process of claim 37 wherein the traction structure comprises a surface of the component provided with tissue-gripping elements configured to grip the tissue of a vessel.

40. The process of claim 37 wherein the traction structure comprises a surface of the component provided with a tacky coating configured to stick to vessel tissue.